```
from keras import packend as R
K.set_session(sess)

# define and train

# save at as a count
outputs == [...]
constant_graph == tf.train.write_graph.electric constant_graph, "/path/to", "countput constant_graph.electric constant_grap
```

# save it as a SavedModel
builder = tf saved\_model.builder.SavedModelBuilder("/path/to/simplegraph")

## TensorFlow 2.0 with GPU Support in CMSSW

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7th Patatrack Hackathon





## **Project objective**

■ Provide all the tools to perform fast inference of TF (2.0) models on GPUs in CMSSW

## Tasks to accomplish

- Build TF 2.0 and all requirements in cmsdist
  - updated Bazel, Protobuf, CUDA, added CUPTI & cuDNN, Done:
  - fix CUBLAS, added Nvidia NCCL, added and compiled **TF 2.0** (C++) Done:
- Deal with Bazel's fear of / inability to handle non-standard environments
- Adapt customizations in CMSSW (mostly interference due to different threading approach)
- Add a "resource scheduler", assigning resources (CPU/GPU\*/GPU RAM) to CMSSW modules
- Handle GPU memory growth on demand and simultaneously prevent too large batch sizes